

Chikaichi ABE* & Yoshiyuki AKASAWA**: A new species of
Oxygyne (Burmanniaceae) found in Shikoku, Japan

阿部近一*・赤沢時之**: 四国におけるヒナノジャクジョウ科
の1新種ヒナノボンボリ

A curious saprophytic plant of the Burmanniaceae, *Glaziocharis abei* Akasawa was found in Shikoku by the senior author in 1943, and it was described by the second author as a new species in 1950. The genus *Glaziocharis* had been reported only from Brasil and *G. abei* was the first record from Asia, so it was an interesting problem for the biogeographical relationships between S. America and E. Asia.

Recently another interesting saprophytic plant was found in Shikoku, Japan, by Mr. Masaharu Hyodo, a member of the Nippon Fernist Club. He collected several specimens of an unknown species of the Burmanniaceae, growing together with the other burmanniaceous plant, *Burmattia liukiensis* Hayata at Ehime Pref., Shikoku, on Oct. 9, 1988. We studied this plant and concluded that it was a new species belonging to the genus *Oxygyne*. The genus *Oxygyne* has been reported only from W. Africa (Cameroon), and the present finding is very interesting from a biogeographical viewpoint.

Oxygyne hyodoi Abe et Akasawa, sp. nov.

Herba saprophytica semiterrestris solitaria, humilis pusilla. Rhizoma repens superne ascendens, flavescens, ca 1-2 cm longum 0.5-1 mm diametrum, constrictum, internodis fusiformibus. Caulis simplex, erectus vel ascendens, teres, glaber, 2-3 cm altus, sparse squamatus. Squamae alternae, subulate, oblongae vel ovato-oblongae, acutae, membranaceae, semihyalinae, glabrae. Inflorescentia breviter racemosa plerumque 3-flora rarius uniflora. Flores erecti, subsessili, 5-8 mm longi 3-5 mm diametri, in vivo smaragdini, in sicco flavido-fuscescentes. Bracteae squamiformes. Bracteolae ad bases florum sitae, late ovatae 2-4 mm longae et latae tenuiter membranaceae hyalinae. Perianthium urceolato-campulatum, 6-lobatum, tubo longitudinaliter 6-plicato, externe glabro, 3-5 mm longo

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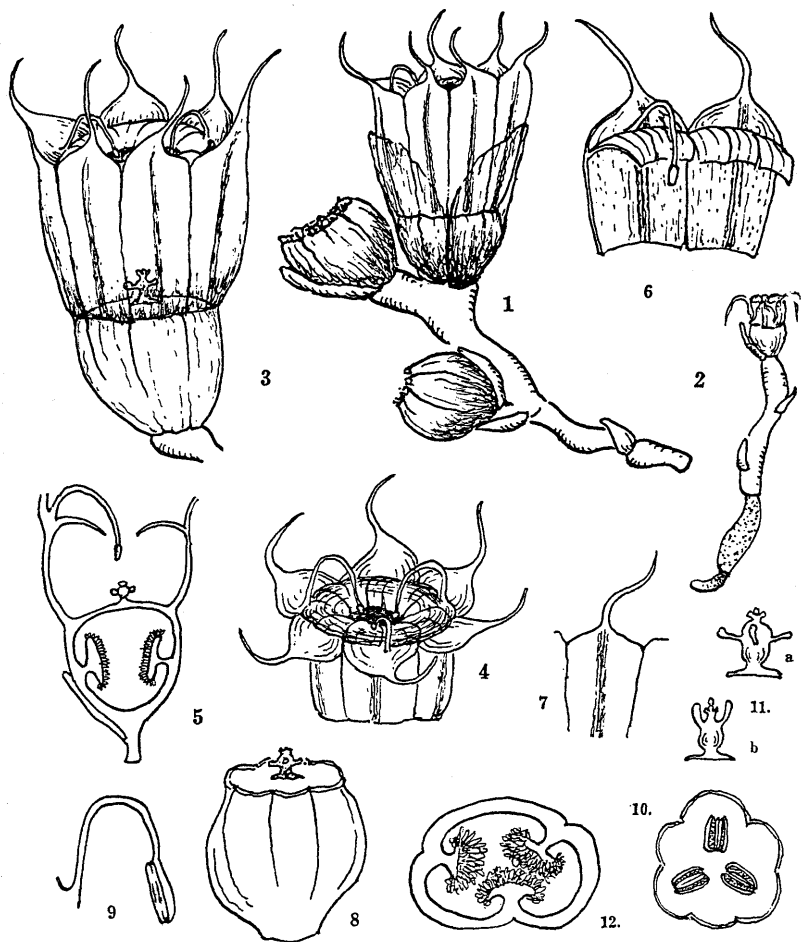


Fig. 1. *Oxygyne hyodoi* Abe et Akasawa. 1, a plant with three flowers, $\times 2.8$. 2, a plant with one flower, $\times 2$. 3, flower, $\times 6.4$. 4, corolla, $\times 6.4$. 5, longitudinal section of the modified flower. 6, inner view of corolla showing one stamen and two lamella, $\times 5.8$. 7, outer view of one perianth, $\times 2.8$. 8, inferior ovary with style, $\times 6.4$. 9, stamen, $\times 10.1$. 10, transverse section of the corolla with three stamens, $\times 6.4$. 11, style, $\times 6.4$. 12, transverse section of the inferior ovary, $\times 7.5$.

3-4 mm diametro, lobis subaequiformibus erectis triangulato-semiorbiculatis, superne abrupte angustatis, apice caudato-elongatis, cum caudam ca 5 mm longis 2 mm latis, caudis ca 2 mm longis; intus fauce lamella patula circumdata 6-lobata,

lobis corollae oppositis transverse rectangularibus confluento-taeniformibus Stamina 3, ad bases lamellarum in fauce corollarum oppositarum inserta, declinata, filamentis teretibus arcuatis, antheris introsis deflexis obovatis obtusis, bilocularibus, connectivis spatulatis glabris exappendiculatis. Ovarium inferum sessile, obconicum uniloculare, placentis 3 parietalibus, medio ovarii affixis, breviter stipitatis, multi-ovulatis. Stylus brevis strumiformis, superne ad laterale triappendies clavatas emittit, apice trilobatus capitato-stigmatosus. Capsula ovato-globosa, ca 4 mm longa 3 mm lata Semina numerosa ellipsoidea, flavo-fuscentia, laevia, ca 0.5 mm longa 0.35 mm lata.

Hab Shikoku. Pref. Ehime, Minami-uwagun, Nishiumicho, in evergreen forest (Masaharu Hyodo, Oct. 9, 1988; Typus, TI).

This new species is generally coincident with the characters of the monospecific genus *Oxygyne* Schltr. with *O. triandra* Schltr., such as the flower with three stamens and each perianth having a lamella on the throat. However, this new species has some distinct characters as follows: the perianth lobes triangularly semiorbicular, the style with three capitate stigmas at apex and three clavate appendices on the upper lateral side, and the perianth-lamellae transversely rectangular and forming an annular taenia on the throat.

Hatusima (1975) reported a new genus *Saionia* Hatusima with *S. shinzatai* Hatusima, from Ryukyu. This genus is characterized by the poorly developed perianth-lamella and does not form an annular taenia distinctly. However, this character is not so sufficient to separate the genus, as seen in our new species. Therefore, we reduced the genus *Saionia* into the genus *Oxygyne*.

Oxygyne shinzatai (Hatusima) Abe et Akasawa, comb. nov

Saionia shinzatai Hatusima, Journ. Geobot. Hokuriku 24: 2, f. 1 and 2 (1976)

Oxygyne hyodoi is similar to *O. shinzatai*, but differs by the transversely rectangular lamella and annular taenia developed well at the upper inner edge of the perianth-tube, the stamens fixed on the corner between the perianth-lobe and the annular taenia. In *O. shinzatai*, the annular taenia poorly developed, and the stamens fixed on the middle of the perianth-lobes.

Literature cited

- Schlechter, R. 1921. Die Thismieae. Not. Bot. Gard. Berlin 8: 44-45 Jonker, F.P. 1938. A monograph of the Burmanniaceae. Med. Bot. Mus. Herb Rijksuniv. 51: 260-261. Akasawa, Y. 1950. A new species of *Glaziocharis*

(Burmanniaceae) found in Japan. Journ. Jap. Bot. 25: 193-196. Hatusima, S. 1976. Two new species of Burmanniaceae from Japan. Journ. Geobot. Hokuriku 24: 2-4.

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1988年の秋、愛媛県で珍しいヒナノシャクジョウ科の植物を採集した。調べたところ、花被筒の花喉部に環をなす附属体があり、3本の雄しべはこの環と花被片の間に付着する等、アフリカから1種類のみ知られる *Oxygyne triandra* Schltr. に類縁があり、*Oxygyne* に属するものであることが判った。新発見の植物は *O. triandra* とは次のような特徴で異なる。花被片は三角状半円形、花被筒の喉にある附属体は横に長い矩形、花柱は楕円形で上部側面に3本の棍棒状の突起があり、先には3本の頭状の花柱がある。新種としてヒナノボンボリの名をつける。学名は採集者の兵頭正治氏に献名したものである。

初島住彦氏は1976年に新属ホシザキシクジョウ属 *Saionia* を報告した。この属は花被筒の喉にある附属体は小さく殆ど環を作らないことで特徴づけられている。しかしヒナノボンボリの発見から考えると、この特徴は属を別にするには不十分のようである。ホシザキシクジョウソウも *Oxygyne* の一員と考える。したがって *Oxygyne* 属はアフリカのカメルーンにある *O. triandra*、琉球の *O. shinzatoi*、四国の *O. hyodoi* の3種になる。ヒナノボンボリとホシザキシクジョウソウとを同一属としたが、*Oxygyne* の属の和名はヒナノボンボリ属としたい。ホシザキシクジョウソウを別属 *Saionia* として扱う時、それにホシザキシクジョウ属を使うのがよいと考える。

兵頭正治氏の好意によって、奇妙な注目すべき植物の研究を委託されたことについて深く感謝すると共に、その発見に賞賛を送りたい。また山崎敬博士からはこの問題に関する文献を複写していただき、また助言をいただいたことに厚く謝意を表します。

□Beck, C.B. (ed.): **Origin and evolution of Gymnosperms** 504 pp. 1988. Columbia Univ. Press, New York. ¥17,000. 9人の著者による裸子植物の総説である。それぞれが化石植物の専門家であるので、豊富な化石資料と文献の上に解説がなされている。ただ化石が中心なので、現生の植物の解析やそれと化石植物との関係となるものたりないものを感じる。しかし、今まで日本に紹介されている化石植物とは異なる新しい植物が多数紹介され、それらをもとに論議が展開されているので興味深い。

(山崎 敬)